

AMENDMENTS TO THE CLAIMS

The following is a complete listing of revised claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1. (Currently Amended) A diagnostic system for a device using X-radiation during examination, comprising:
an X-ray image amplifier having a fluorescent output screen;
a CCD camera coupled to said fluorescent output screen of said X-ray image amplifier via an optical system;
a device for generating external trigger pulses; and
a system control[[],] configured to,
control a readout of the CCD camera without a desired signal including image information at regular time intervals in response to reset pulses at regular time intervals in the absence of X-radiation, and
control triggering of a read out of the CCD camera without a desired signal including image information and a subsequent triggering of an exposure of the CCD camera when an external trigger pulse occurs at a point in time at which no readout of the CCD camera is to take place; wherein
if the time elapsed between a most recent reset pulse and an external trigger pulse is less than a duration of the readout of the CCD camera without a desired signal including image information,

a readout without a desired signal including image information is suppressed, and exposure of the CCD camera is triggered directly by the external trigger pulse.

2. (Canceled).
3. (Previously presented) The diagnostic system as claimed in claim 1, wherein, when an external trigger pulse occurs at a point in time at which no readout of the CCD camera is to take place, a readout without a useful signal is initially carried out and then the diagnostic system is subsequently triggered for the emission of X-radiation via an X-ray emitter.
4. (Previously Presented) The diagnostic system as claimed in claim 1, wherein the device for generating external trigger pulses is an ECG electrode.
5. (Previously Presented) The diagnostic system as claimed in claim 1, wherein the device for generating external trigger pulses is an angle sensor mounted at a C-arm of the diagnostic system.
6. – 7. (Canceled).

8. (Previously Presented) The diagnostic system as claimed in claim 3, wherein the device for generating external trigger pulses is an ECG electrode.

9. – 10. (Canceled).

11. (Previously Presented) The diagnostic system as claimed in claim 3, wherein the device for generating external trigger pulses is an angle sensor mounted at a C-arm of the diagnostic system.

12. (Previously Presented) The diagnostic system as claimed in claim 4, wherein the device for generating external trigger pulses is an angle sensor mounted at a C-arm of the diagnostic system.

13. – 14. (Canceled).

15. (Previously Presented) The diagnostic system as claimed in claim 8, wherein the device for generating external trigger pulses is an angle sensor mounted at a C-arm of the diagnostic system.

16. (Canceled).

17. (Currently Amended) A diagnostic system for a device using X-radiation during examination, comprising:

an X-ray image amplifier having a fluorescent output screen;

a CCD camera coupled to said fluorescent output screen of said X-ray image amplifier via an optical system;

means for generating an external trigger pulse; and

means for providing a readout of the CCD camera without a desired signal including image information in response to reset pulses generated at regular intervals and before an exposure of the CCD camera when an external trigger pulse is generated at a time when no readout of the CCD camera is to take place, and for suppressing a readout without a desired signal including image information before an exposure of the CCD camera when an external trigger pulse is generated at a time when a readout of the CCD camera is to take place, wherein

if the time elapsed between a most recent reset pulse and an external trigger pulse is less than a duration of the readout of the CCD camera without a desired signal including image information, a readout without a desired signal including image information is suppressed, and exposure of the CCD camera is triggered directly by the external trigger pulse.

18. (Previously Presented) The diagnostic system as claimed in claim 17, wherein the diagnostic system is for a device using X-radiation during

examination and wherein the means for providing is configured such that, in the absence of X-radiation, a readout of the CCD camera without a useful signal takes place at regular time intervals.

19. (Canceled).

20. (Previously Presented) The diagnostic system as claimed in claim 17, wherein, when an external trigger pulse occurs at a point in time at which no readout of the CCD camera is to take place, a readout without a useful signal is initially carried out and then the diagnostic system is subsequently triggered for the emission of X-radiation via an X-ray emitter.

21. (Previously Presented) The diagnostic system as claimed in claim 1, wherein the external trigger pulses are generated in a non-predetermined fashion.

22. (Previously Presented) The diagnostic system as claimed in claim 1, wherein the external trigger pulses are generated in a non-periodic fashion.

23. (Previously Presented) The diagnostic system as claimed in claim 17, wherein the external trigger pulses are generated in a non-predetermined fashion.

24. (Previously Presented) The diagnostic system as claimed in claim 17, wherein the external trigger pulses are generated in a non-periodic fashion.

25. (Canceled).

26. (New) A diagnostic system for a device using X-radiation during examination, comprising:

- a CCD camera including an image converter;
- a device for generating external trigger pulses; and
- a system control configured to,
 - control a readout of the CCD camera without a desired signal including image information at regular time intervals in response to reset pulses at regular time intervals in the absence of X-radiation, and
 - control triggering of a read out of the CCD camera without a desired signal including image information and a subsequent triggering of an exposure of the CCD camera when an external trigger pulse occurs at a point in time at which no readout of the CCD camera is to take place; wherein

if the time elapsed between a most recent reset pulse and an external trigger pulse is less than a duration of the readout of the CCD camera without a desired signal including image information, a readout without a desired signal including image information is suppressed, and exposure of the CCD camera is triggered directly by the external trigger pulse, and

the image converter accumulates charge in a light-sensitive region and transfers the accumulated charge to a memory region by the trigger pulse, the memory region being separate from incident light, wherein

after transferring the accumulated charge, the actual exposure of the light-sensitive region of the image converter is performed, and actual readout of the accumulated charge corresponding to the exposure is performed and fed to the image system as a video signal.